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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/693,008

10/24/2003

Alex C. Toy

1023-287US01

9358

28863

7590

07/05/2006

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EXAMINER

KAHELIN, MICHAEL WILLIAM

ART UNIT

PAPER NUMBER

3762

DATE MAILED: 07/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/693,008

Applicant(s)

TOY ET AL.

Examiner

Michael Kahelin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 April 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 38-43 is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-16, 18-26, 28-30 and 32-37 is/are rejected.
- 7) ☒ Claim(s) 6, 17, 27 and 31 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>20060526; 20060425</u> . | 6) <input checked="" type="checkbox"/> Other: <u>IDS 20050906</u> .                     |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/25/2006 has been entered.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

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consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1-5, 8, 12-16, 22-26, 28-30, and 32-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lebel et al. (US 2003/0065308, hereinafter "Lebel") in view of Mann et al. (US 5,833,623, hereinafter "Mann"). Lebel discloses the essential features of the claimed invention including the following:

5. In regards to claims 1, 2, 12, 13, 24, 28 and 32, Lebel discloses a programmer device/method having a display and a lighting source wherein the lighting source is disabled during activation of a telemetry circuit to reduce interference (par. 0257). The lighting source inherently has associated circuitry that is also disabled because the "RF quiet signal" must be transmitted/processed by an associated circuitry.

6. In regards to claims 3 and 14, it is well known in the art that circuit components, including LCD displays, are typically connected to circuit boards by soldering or other means to provide a stable means to connect circuit components. Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to connect the display to a circuit board to provide a stable means to connect circuit components.

7. In regards to claims 4 and 15, the source is enabled (via "RF receive power signal") when telemetry is not activated (par. 0257).

8. In regards to claims 5, 16, 22, 23, 26 and 30, the device is a neurostimulator (par. 0091), with an internal antenna (par. 0216) that transmits signals, and the source is enabled when the telemetry is not activated (par. 0257).

9. In regards to claim 8, the display is an LCD (par. 0067).
10. In regards to claims 25 and 29, the device is handheld and portable (par. 0115).
11. In regards to claims 33-37, it is inherent that substantially an entire circuit board on which the source is mounted is disabled because the source (Fig. 5) comprises substantially the entire LCD circuit board and this component is separate from the other components of the device (par. 0197). Alternatively, it is well known in the art to place system components on individual circuit boards to allow the individual systems to use similar voltage, current, and impedance characteristics while also minimizing housing volume. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Lebel's invention by disabling an entire circuit board when the source is disabled to disable the high-noise circuit board that is associated with the high-noise display.
12. Although Lebel discloses disabling a source associated with a display to reduce EMI, Lebel does not expressly disclose disabling an LCD display during telemetry. Mann teaches of disabling a display (col. 17, line 48) to avoid electrical interference (between the telemetry data and display rendering data). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Lebel's invention by disabling not only the lighting source, but also a display to avoid electrical interference.
13. Alternatively, claims 1, 2, 4, 12, 13, 15, 22-24, 28 and 32 rejected under 35 U.S.C. 103(a) as being unpatentable over Mann in view of Lebel. Mann discloses the essential features of the claimed invention including the following:

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14. In regards to claims 1, 2, 12, 13, 24, 28 and 32, Mann discloses activating telemetry in a programmer for an implantable device and disabling a display during activation (col. 17, line 47), and the display inherently has associated circuitry because it is controlled by a controller.

15. In regards to claims 4 and 15, the display is enabled when the telemetry is not activated (col. 17, line 47).

16. In regards to claims 22 and 23, the device is a neurostimulator (col. 13, line 9).

17. Although Mann does not explicitly disclose providing a display lighting source, it is inherent that the display has a lighting source because some amount of light is required to see images. Therefore, for a component to be a display (i.e. seen by a person), it must have some sort of lighting source. Alternatively, Lebel teaches of providing a display lighting source in a programmer to provide ease of viewing in low-light environments. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Mann's invention with a display lighting source to provide ease of viewing in low-light environments.

18. Claims 7, 9, 11, and 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lebel in view of Mann (or Mann in view of Lebel), as applied to claims 1 and 12, and further in view of Stanton et al. (US 6,249,703, hereinafter "Stanton"). Lebel's (or Mann's) modified invention disclose the invention substantially as claimed except for providing an internal and external antenna, and placing the communication circuitry on a first circuit board and the display on a second. Stanton teaches of a programmer for an implantable device that comprises an internal antenna

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and a removable external antenna so that the main body of the programmer can be seen and operated while the antenna is in contact with the body. Therefore, it would have been obvious to someone with ordinary skill in the art at the time of invention to provide Lebel's (or Mann's) invention with an internal and external antenna so that the main body of the programmer can be seen and operated while the antenna is in contact with the body. In regards to claims 9 and 20, Lebel discloses that their invention can consist of several hybrid circuit boards (Lebel, par. 0191) and a number of modules, including the ASIC and LCD display and drivers (Lebel, par. 0197), to fit the particular design constraints. Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to place the telemetry circuit on a first circuit board and the display circuitry on another, based on the teaching of Lebel to fit volumetric design constraints.

19. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lebel in view of Mann and Stanton (or Mann in view of Lebel and Stanton) as applied to claim 9 above, and further in view of Stein et al. (US 2004/0230247, hereinafter "Stein").

Lebel's (or Mann's) modified invention teaches of the invention essentially as claimed except for an antenna defining an aperture with a battery bay extending into the aperture. Stein teaches of an antenna (Fig. 9, element 66) with a battery bay (Fig. 9, element 86) in the aperture to increase the inductance of the antenna and efficiently utilize the housing volume. Therefore, it would have been obvious to someone with ordinary skill in art at the time of invention to provide Lebel's (or Mann's) modified

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invention with an antenna with a battery bay in the aperture to increase the inductance of the antenna and efficiently utilize the housing volume.

### ***Allowable Subject Matter***

20. Claims 38-43 are allowed.

21. Claims 6, 17, 27 and 31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Response to Arguments***

22. Applicant's arguments with respect to claims 1-5, 7-16, 18-26, 28-30, and 32-37 have been considered but are moot in view of the new ground(s) of rejection.

23. Applicant's arguments, see "Remarks", filed 4/25/2006, with respect to claims 6, 17, 27 and 31 have been fully considered and are persuasive. The rejection of these claims has been withdrawn.

### ***Double Patenting***

24. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir.



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1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

25. Claims 1-3, 8, 12-14, 22-24, 28, and 32-37 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 22 and 32 of copending Application No. 10/693,835. Although the conflicting claims are not identical, they are not patentably distinct from each other because the copending application's claims are more narrow and meet the limitations of the broader claims of this application.

26. Claims 4, 5, 15, 16, 25, 26, 29, and 30 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 22 of copending Application No. 10/693,835, hereinafter "'835" in view of Lebel. '835 claims the essential features of the instant application's invention except for enabling the display after telemetry and providing a handheld, portable device. Lebel teaches of enabling the display after telemetry to provide diagnostic and programming information when EMI resistance is no longer critical and providing a handheld and portable device to allow the implant to be programmed in environments other than a physician's office. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify '835 by enabling the display after telemetry to provide

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diagnostic and programming information when EMI resistance is no longer critical and providing a handheld and portable device to allow the implant to be programmed in environments other than a physician's office.

Claims 7, 9-11 and 18-21 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 26 of copending Application No. 10/693,835 in view of Stanton. '893 claims the essential features of the instant application's invention except for a second external antenna. Stanton teaches of providing a second external antenna to allow the antenna to maintain close proximity to the implant site, while still allowing the programmer to be viewed. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide '893 with a second external antenna to allow the antenna to maintain close proximity to the implant site, while still allowing the programmer to be viewed.

These are provisional obviousness-type double patenting rejections because the conflicting claims have not in fact been patented.

### ***Conclusion***

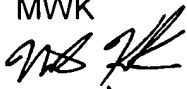
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Kahelin whose telephone number is (571) 272-8688. The examiner can normally be reached on M-F, 9-5.

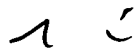
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Sykes can be reached on (571) 272-4955. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MWK

  
6/29/06

  
GEORGE R. EVANISKO  
PRIMARY EXAMINER  
6/29/6